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10/598,423	08/29/2006	Reiji Hasegawa	00862.521840.	4490

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EXAMINER

KASRAIAN, ALLAHYAR

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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11/05/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,423	Applicant(s) HASEGAWA ET AL.	
	Examiner ALLAHYAR KASRAIAN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>Aug. 25, 2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. The present Office Action is in response to Applicant's amendment filed on Aug. 25, 2010. **Claims 1-18** are now pending in the present application. **This Action is made FINAL.**
2. The objection to the drawing is withdrawn. The replacement-drawing sheet was received on Aug. 25, 2010 and acknowledged by the Examiner.
3. The objection to specification is withdrawn. The "amendments to the specification" received on Aug. 25, 2010 is acknowledged by the Examiner.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on Aug. 25, 2010 has been considered by the Examiner and made of record in the application file.

Response to Arguments

5. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

6. **Claims 1, 4 and 10** are objected to because of the following informalities:

a) On **line 3** of **claim 1**, the acronym word, "USB" should be presented for what it stands for. a) On **line 3** of **claim 1**, the acronym word, "USB" should be presented for what it stands for.

b) On **line 4** of **claim 4**, the acronym word, "USB" should be presented for what it stands for.

c) On **line 2** of **claim 10**, the acronym word, "USB" should be presented for what it stands for.

d) On **line 4** of **claim 13**, the acronym word, "USB" should be presented for what it stands for.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4, 10 and 13 are vague and indefinite because they recite, "transmitting the information for setting the wireless network, input using said operation unit, *to the communication terminal, in correspondence with a data-request command sent from the USB host controller in response to the data-receiving request*". The relationship between transmitting the information for setting the wireless network and "a

Art Unit: 2617

data-request command sent from the USB host controller in response to the data-receiving request” is unclear. Examiner was also unable to find the information related to the indicated limitation in the current specification. For sake of applying prior art, Examiner interprets the limitation as, “a transmission unit configured to transmit the information for setting the wireless network, input using said operation unit, *to the communication terminal having the USB host controller*”.

Dependent **claims** are also rejected by the virtue of their dependency on the independents **claim 1, 4, 10 and 13**.

Claims 2 and 11 are also vague and indefinite because it recites, “a second issuance unit configured to issue a data request to the communication terminal using the USB function controller, and receiving the information for setting the wireless network sent from the USB host controller in response to the data request by the second issuance unit” and claim 1 include the limitation, “an issuance unit configured to issue a data-receiving request to the communication terminal using the USB function controller”. The difference between the “data-receiving request” and “a data request” is unclear and also their relation with respect to the first and second issuance units.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 1, 2, 10, and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Imai et al. (US Patent Application Publication # 20030123074 A1)** (hereinafter Imai) in view of **Gassho et al. (US Patent Application Publication # 20030091015 A1)** (hereinafter Gassho).

Consider **claim 1**, Imai discloses a printing apparatus, comprising:

a USB function controller for causing the printing apparatus to operate as a USB device (FIG. 1, par. 0013 and 0056 for USB function control 113), connected with a communication terminal having a USB host controller via a USB interface for receiving

Art Unit: 2617

data from an information processing apparatus on a wireless network via the communication terminal (FIG. 2, par. 0061 for the external processing terminal which is considered as the communication terminal; par. 0068 for the USB host control unit 210, par. 0064 and 0067 for communication unit 209 and a destination communication apparatus which is considered as an information processing apparatus);

an operation unit, operated by a user, configured to input information [for setting of the wireless network] (FIGS. 1 and 15, par. 0009, 0052 for operation display unit 108);

an issuance unit configured to issue a data-receiving request to the communication terminal using the USB function controller (FIGs. 1 and 15, par. 0013, 0056 for USB function control 113); and

a transmission unit configured to transmit the information [for setting the wireless network], input using said operation unit, to the communication terminal, in correspondence with a data-request command sent from the USB host controller in response to the data-receiving request (FIG. 1, par. 0056-0057, and FIG. 4, par. 0084).

However, Imai fails to explicitly disclose inputting information for setting of the wireless network configured to input information for setting of the wireless network from the operation unit operated by user; and/or transmitting the information for setting the wireless network, input using said operation unit.

In the same field of endeavor, Gassho discloses inputting information for setting of the wireless network configured to input information for setting of the wireless network from the operation unit operated by user; and/or transmitting the information for

Art Unit: 2617

setting the wireless network, input using said operation unit (FIG. 3, par. 0054 and 0056-0062 for the printer 200 with the control panel 220 for receiving and processing the user's input, the access point 100, the personal computer 300, and the user wireless LAN).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the user's input for setting of WLAN from a control panel of a printer as taught by Gassho to the printer connected with a processing apparatus via a USB connection as disclosed by Imai for purpose of setting and resetting in case of connecting a device to a wireless network.

Consider **claim 10**, Imai discloses a control method for printing apparatus having a USB function controller for causing the printing apparatus to operate as a USB device (FIG. 1, par. 0013 and 0056 for USB function control 113), connected with a communication terminal having a USB host controller via a USB interface which performs data reception from an information processing apparatus on a wireless network via the communication terminal (FIG. 2, par. 0061 for the external processing terminal which is considered as the communication terminal; par. 0068 for the USB host control unit 210, par. 0064 and 0067 for communication unit 209 and a destination communication apparatus which is considered as an information processing apparatus), the control method comprising:

issuing a data-receiving request to the communication terminal using the USB function controller (FIG. 2, par. 0061 for the external processing terminal which is

considered as the communication terminal; par. 0068 for the USB host control unit 210, par. 0064 and 0067 for communication unit 209 and a destination communication apparatus which is considered as an information processing apparatus); and

transmitting the information [for setting the wireless network, input in said inputting step], to the communication terminal, in correspondence with a data-request command sent from the USB host controller in response to the data-receiving request (FIG. 1, par. 0056-0057, and FIG. 4, par. 0084).

However, Imai fails to explicitly disclose inputting information for setting of the wireless network by an operation of a user; and/or transmitting the information for setting the wireless network, input in said inputting step.

In the same field of endeavor, Gassho discloses inputting information for setting of the wireless network by an operation of a user; and/or transmitting the information for setting the wireless network, input in said inputting step (FIG. 3, par. 0054 and 0056-0062 for the printer 200 with the control panel 220 for receiving and processing the user's input, the access point 100, the personal computer 300, and the user wireless LAN).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the user's input for setting of WLAN from a control panel of a printer as taught by Gassho to the printer connected with a processing apparatus via a USB connection as disclosed by Imai for purpose of setting and resetting in case of connecting a device to a wireless network.

Consider **claims 2 and 11**, Imai as modified by Gassho discloses the claimed invention **as applied to claims 1 and 10 above**, a second issuance unit configuring to issue a data request to the communication terminal using the USB function controller (par. 0096, 0108); and reception unit configuring to receive the information for setting the wireless network sent from the USB host controller in response to the data request by the second issuance unit (par. 0096, 0108).

10. **Claims 3 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Imai et al. (US Patent Application Publication # 20030123074 A1)** (hereinafter Imai) in view of **Gassho et al. (US Patent Application Publication # 20030091015 A1)** (hereinafter Gassho) in view of **Applicant Admitted Prior Art (Background Art section of current Application)** (hereinafter AAPA).

Consider **claims 3 and 12 as applied to claims 1 and 10 above**, Imai as modified by Gassho discloses the claimed invention except wherein the information for setting of the wireless network includes an encryption key in printing apparatus and the information processing apparatus.

In the same field of endeavor, AAPA discloses wherein the information for setting of the wireless network includes an encryption key in printing apparatus and the information processing apparatus (page 2, lines 12-21).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate an encryption key to between a PC and a multi-function device as taught by AAPA to method of the wireless setting connection

Art Unit: 2617

as disclosed by Imai as modified by Gassho for purpose of providing safe connection between the devices in a wireless network.

11. **Claims 4-6, 8, 9, 13-15, 17, and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Imai et al. (US Patent Application Publication # 20030123074 A1)** (hereinafter Imai) in view of **Gassho et al. (US Patent Application Publication # 20030091015 A1)** (hereinafter Gassho) in view of **Lam et al. (US Patent Application Publication # 20030142683 A1)** (hereinafter Lam).

Consider **claims 4 and 13**, Imai discloses a system comprising:

a wireless communication terminal having a wireless communicator and a USB host controller (FIG. 2 par. 0067-0068 for data processing terminal, considered as the wireless communication terminal, with the wireless communicator 209 and USB host controller 210), configured to execute data reception from an information processing apparatus via a wireless network (FIG. 2, par. 0067 for a destination communication apparatus which is considered as an information processing apparatus); and

a printing apparatus (FIG. 1) comprising:

a USB function controller for causing the printing apparatus to operate as a USB device (FIG. 1, par. 0013 and 0056 for USB function control 113), and connected with said wireless communication terminal via a USB interface (FIG. 2, par. 0061 for the external processing terminal which is considered as the communication terminal; par. 0068 for the USB host control unit 210, par. 0064 and 0067 for communication unit 209 and a destination communication apparatus which is considered as an information

Art Unit: 2617

processing apparatus), configured to arrange for receiving data on a wireless network via the wireless communication terminal (par. 0067);

an operation unit, operated by a user, configured to input information [for setting of the wireless network] (FIGS. 1 and 15, par. 0009, 0052 for operation display unit 108);

an issuance unit configured to issue a data-receiving request to the wireless communication terminal using the USB function controller (FIGs. 1 and 15, par. 0013, 0056 for USB function control 113); and

a transmission unit configured to transmit the information [for setting of the wireless network], input using the operation unit to said wireless communication terminal in correspondence with a data-request command sent from the USB host controller in response to the data-receiving request (FIG. 1, par. 0056-0057, and FIG. 4, par. 0084),

However, Imai fails to explicitly disclose inputting information for setting of the wireless network configured to input information for setting of the wireless network from the operation unit operated by user; and/or transmitting the information for setting the wireless network, input using said operation unit.

In the same field of endeavor, Gassho discloses inputting information for setting of the wireless network configured to input information for setting of the wireless network from the operation unit operated by user; and/or transmitting the information for setting the wireless network, input using said operation unit (FIG. 3, par. 0054 and 0056-0062 for the printer 200 with the control panel 220 for receiving and processing

Art Unit: 2617

the user's input, the access point 100, the personal computer 300, and the user wireless LAN).

Therefore, it would have been obvious to a person or ordinary skill in the art at the time the invention was made to incorporate the user's input for setting of WLAN from a control panel of a printer as taught by Gassho to the printer connected with a processing apparatus via a USB connection as disclosed by Imai for purpose of setting and resetting in case of connecting a device to a wireless network.

However, Imai as modified by Gassho fails to explicitly disclose wherein the wireless communication terminal receives data from the information processing apparatus on the wireless network, and sends the data to the printing apparatus via the USB interface.

In the same field of endeavor, Lam discloses wherein the wireless communication terminal receives data from the information processing apparatus on the wireless network, and sends the data to the printing apparatus via the USB interface (FIG. 1D, par. 0010, and FIG. 2, par. 0035-0037).

Therefore, it would have been obvious to a person or ordinary skill in the art at the time the invention was made to incorporate connect a user device to a printer via a wireless network router connected to the printer by a USB connection as taught by Lam to the method of wireless connection setting from a printer connected to an access point as disclosed by Imai as modified by Gassho for purpose of sending data from a user device to a printer which is connected to an access point by a USB connection.

Art Unit: 2617

Consider **claims 5 and 14**, Imai as modified by Gassho as modified by Lam **as applied to claims 4 and 13 above**, and Imai further discloses wherein said wireless communication terminal requests said information for setting of the wireless network from said printing apparatus in correspondence with a data-receiving request command received from printing apparatus via said USB interface (par. 0096, 0108).

Consider **claims 6 and 15**, Imai as modified by Gassho as modified by Lam **as applied to claims 4 and 13 above**, and Imai further discloses wherein said wireless communication terminal transmits the information for setting of the wireless network to said printing apparatus in correspondence with a data-request command received from said printing apparatus via the USB interface (par. 0096, 0108).

Consider **claims 8 and 17**, Imai as modified by Gassho as modified by Lam **as applied to claims 4 and 13 above**, Imai further discloses wherein said printing apparatus further has a USB hub connected with said wireless communication terminal, and wherein the operation unit is connected with a first USB function controller, and the information for setting of the wireless network is arranged for said wireless communication terminal from the operating unit through the first USB interface (par. 0013, 0055-0056).

Consider **claims 9 and 18**, Imai as modified by Gassho as modified by Lam **as applied to claims 4 and 13 above**, Imai further discloses wherein said printing

Art Unit: 2617

apparatus further has a display unit and a second USB function controller, and wherein the display unit displays a value inputted from the console via the second USB function controller (par. 0055-0057).

12. **Claims 7 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Imai et al. (US Patent Application Publication # 20030123074 A1)** (hereinafter Imai) in view of **Gassho et al. (US Patent Application Publication # 20030091015 A1)** (hereinafter Gassho) in view of **Lam et al. (US Patent Application Publication # 20030142683 A1)** (hereinafter Lam) in view of **Applicant Admitted Prior Art (Background Art section of current Application)** (hereinafter AAPA).

Consider **claims 7 and 16 as applied to claims 4 and 13 above**, Imai as modified by Gassho as modified by Lam discloses the claimed invention except wherein the information for setting of the wireless network includes an encryption key to perform wireless communication with the information processing apparatus via said wireless network.

In the same field of endeavor, AAPA discloses wherein the information for setting of the wireless network includes an encryption key to perform wireless communication with the information processing apparatus via said wireless network (page 2, lines 12-21).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate an encryption key to between a PC and a multi-function device as taught by AAPA to method of the wireless setting connection

Art Unit: 2617

as disclosed by Imai as modified by Gassho for purpose of providing safe connection between the devices in a wireless network.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- a. Satake et al. (U.S. Patent # 7295338 B2) disclose Status information acquisition from plural functions included in image processing apparatus.
- b. Ohara (U.S. Patent Application Publication # 20050248803) disclose Method of connecting terminal device to printer.

Art Unit: 2617

c. Satake et al. (U.S. Patent Application Publication # 20030197890) disclose Status information acquisition from plural functions included in image processing apparatus.

15. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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Hand-delivered responses should be brought to

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401 Dulany Street
Alexandria, VA 22314

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Allahyar Kasraian whose telephone number is (571) 270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jinsong Hu can be reached on (571) 272-3965. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Art Unit: 2617

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Allahyar Kasraian/
Examiner, Art Unit 2617

/Jinsong Hu/

Supervisory Patent Examiner, Art Unit 2617